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AMG-12

TSTCore Update

12 June 1996



Topics

- **Events Calendar**
- **HLA Baseline Definition Milestones**
- **Working Group Activities and Plans**
- **RTI Status and Directions**
- **AMG Action Items**
 - **Test procedures**
 - **HLA Security Architecture**
 - **Frequently Asked Questions**
- **HLA Technical Library**



Events Calendar

- **Since last AMG meeting:**

- 24-25 April 96 AMG-11
- 30 April 96 RTI v0.3 release; buddy system kickoff
- 2 May 96 ITEA Conference
- 22 May 96 PADS Conference
- 23 May 96 OMT v0.3 release
- 28 May 96 RTI v0.32 release
- 31 May 96 Time Mgt Document v0.3 release
- 3 June 96 OMG Technical Meetings
- 4 June 96 RTI v0.3e release (Declaration Mgt Experiments)
- 7 June 96 Declaration Management Tech Exchange
- 7 June 96 Draft IF v0.5 distributed to AMG
- 11 June 96 MRCI PDR

- **Upcoming Events:**

- 12-13 June 96 AMG-12
- 13 June 96 I/F Spec v0.5 release
- 21 June 96 RTI v0.33 release
- 17-18 July 96 AMG-13
- 21-22 August 96 AMG-14
- 16-20 Sept 96 15th DIS Workshop
- November 96 AMG-15 (To be scheduled)
- 2-6 December 96 I/ITSEC



HLA Baseline Development Milestones

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- **HLA Baseline = Rules + OMT Specification + Interface Specification**
- **Priority focus between now and August for prototypes and experiments is on HLA baseline definition**
- **The current set of HLA prototypes are also providing valuable input for development of fieldable infrastructure software (SW) and other supporting elements of the HLA, including**
 - **RTI 0.X series provides a 'reference design' for 1.0 fieldable prototype**
 - **Protofederations provide input to RTI functional and performance specification for industry RTI (2.0) procurement**
 - **Federation development process view provides basis for potential recommended practice**
 - **I/F test procedures**



HLA Baseline Development Milestones

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- **AMG-12** (12-13 June)
 - Rules v0.1; OMT v0.3; I/F v0.5
- **AMG-13** (17-18 July)
 - Rules v1.0 (draft) review
 - ♦ draft release 8 July; comments requested by 15 July
 - OMT v1.0 (draft) review
 - ♦ draft release 9 July; OMTWG meets 11 July
 - I/F v0.5 review
 - ♦ IFWG meets 25-26 June
 - acceptable services (v1.0), ready for AMG review
 - plan for consideration of services still under discussion, primarily declaration management
- **AMG-14** (21-22 August)
 - IFWG meets 30-31 July to complete WG review of remaining services
 - Complete Version 1.0 final review
 - ♦ draft release 15 August



Rules

- **Rules Version 0.1 is on the net**
- **Comments received to date support content of rules, suggest some changes in wording and description**
- **Request any added comments from AMG by 26 June**
- **Version 0.2 to be drafted and circulated by 8 July; comments request back by 15 July**
- **Discussion item for AMG-13**



I/F Spec Working Group

- **Interface Specification Version 0.4 released 7 March 1996**
- **WG met 15 May 1996 - reviewed newly submitted comments**
- **Draft I/F Version 0.5 released to AMG on 7 June 1996**
 - **AMG release v0.5 14 June 1996**
- **IF Version 1.0 Schedule**
 - **IFWG to meet 25 & 26 June 1996**
 - **Brief AMG-13 on 17 July on firm areas and changing areas**
 - **IFWG to meet 30-31 July 1996**
 - **Draft v1.0 to AMG-14 August 1996**
 - **AMG-14 approve release of v1.0, 22 August 1996**
- **Only major change anticipated between v0.5 and v1.0 is Declaration Management**



OMT Working Group

- **OMTWG-8 (16 May)**
 - OMT v0.3 final review
 - OMT v1.0 Workplan
- **OMT v0.3 released 23 May 1996**
 - Now comprises basic template, extensions, use case(s), and description of Federation Development and Execution Process as separate documents
 - Comments solicited for incorporation in v1.0
- **OMTWG-9 planned for 19 June**



Related Required Actions

- **Compliance Checklist**
 - Review underway by OMTWG and IFWG
 - OMTWG to develop OMT test procedures
 - Propose: Input requested by 8 July
 - Propose: Discussion Topic for AMG-13
- **Federate Profiles**
 - Initial profiles completed for AMG-10
 - Plan is to update profile format and update profile data as prototyping experience base expands
 - Propose: Input on format changes by 27 June
 - Propose: Revised format distributed by 8 July
 - Propose: Inputs provided by AMG-13



RTI Status

- **AMG-11: instituted RTI - federation buddy system**
 - Results have been very positive
- **RTI Releases**
 - 0.3 released 30 April
 - 0.32 released 28 May
 - 0.32e released 4 June (Declaration Management Experiments)
 - 0.33 release set for 21 June
- **No plans for a 0.4 release, based on feedback from AMG**
 - RTI investigation with time management proposed to address outstanding issues with respect to event retraction
- **Work is underway to plan for 1.0 development**
 - RTI 0.X provides a design reference for 1.0 evolution
 - Release schedule to be developed
- **Work continues in preparation for competitive procurement (2.0)**
 - Functional and performance specification being developed



RTI Buddy Visits

- **Engineering - 13 & 14 May**
(ACETEF: Harry Wolfson, Steve McGarry, MIT/LL)
 - Adapted ACETEF “benchmark” program to work with RTI v0.3
 - Observed RTI deadlock
- **PPF - 13 May, 23 & 24 May, June 5-7**
(TASC Boston, IST Orlando, Raytheon Portsmouth, RI: Carol Chiang, MIT/LL)
 - Discussed TASC Common Software Framework and RTI deadlock
 - Site visits to CCTT and BDS-D to discuss operation problems/issues
 - Participated in BFTT/JTCTS Integration
- **JTFP - 15 & 16 May**
(Aegis Research: Cris Hutto, Richard Weatherly, MITRE)
 - Discussed federate middleware, RTI issues
 - Observed RTI deadlock in EAGLE and NSS federates
- **Analysis - 21 May**
(JWARS PO: Annette Wilson, MITRE)
 - Discussed structure of Analysis Proto-federation



RTI Buddy System - Results

- **‘Buddy’ approach is working well**
 - **Deadlock clearly defined, characterized, and addressed based on cooperative efforts between RTI and federation teams**
 - **Addressing the deadlock problem**
 - **Teleconference held with federation ‘deputies’ on 24 May to explain current understanding of the problem and discuss short term RTI fixes**
 - **RTI v0.32 released 28 May with short term fixes**
 - **Teleconference held 31 May to get ‘deputies’ feedback on operation of RTI v0.32.**
 - **RTI v0.33 to be released 21 June**
- **RTI buddies will continue to work with protofederations during experiments**



Action Items

- **Testing**
- **Security**
- **FAQs**



Test Working Group Update

- **Draft Interface Test Procedures, version 0.2, dated 4 May 1996, available on the web page.**
 - Document incorporates state diagrams for each procedure.
- **Test Procedures (v0.3) will include:**
 - Update to v0.5 of Interface Spec
 - Service Implementation Log (how to record data during testing; this is an attachment to the procedures)
 - Exception behavior
 - Graphical state diagrams
 - Ownership Tests divided into: transferring attributes and transferring id
 - Behavior for "responding to" tests
 - Enhanced time management tests



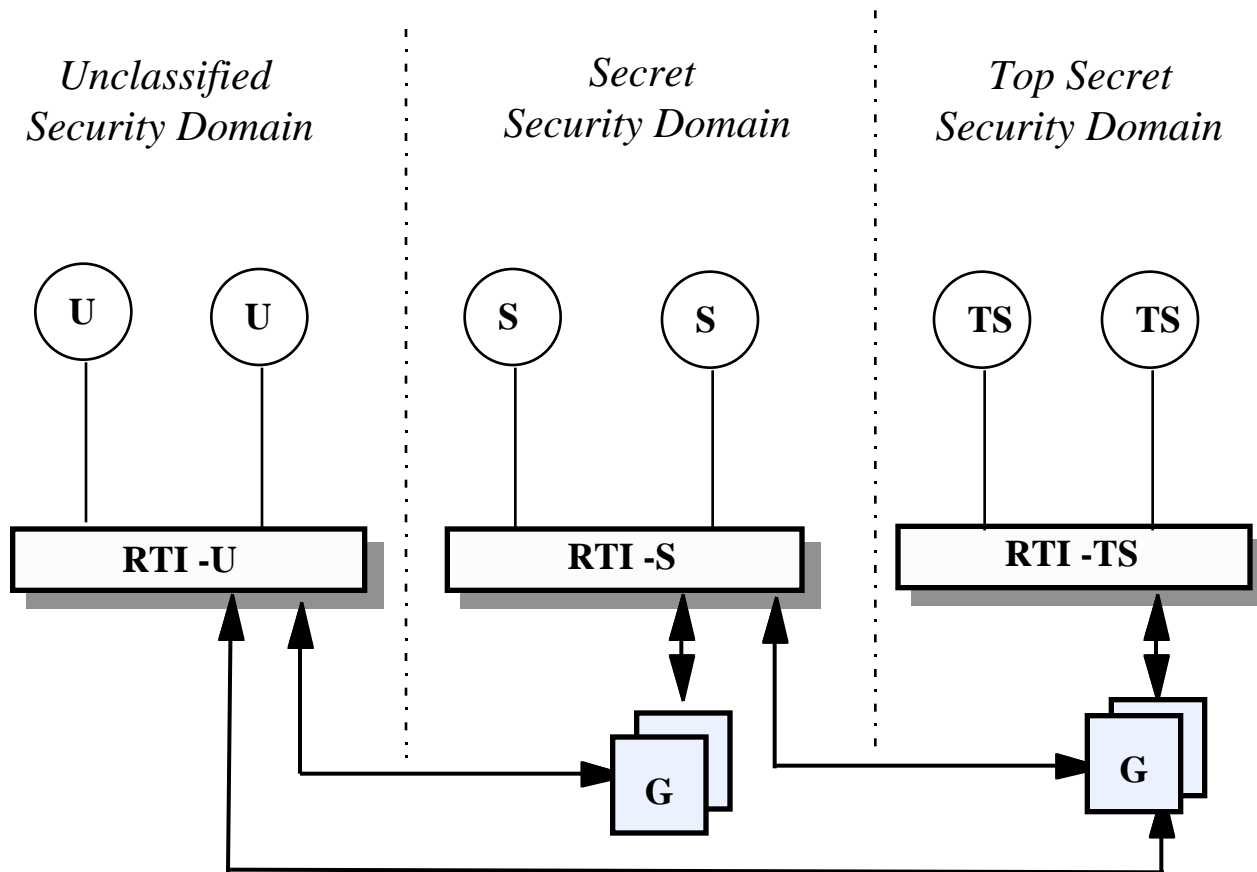
HLA Security Status

- **After some contractual difficulties, the HLA Security Architecture effort is back on track**
 - TIS personnel met with DMSO and TST members on 3 June
 - Follow-on meetings with OMTWG and I/F Spec chairs to provide initial assessments of security impacts on OMT and I/F Spec
- **Initial quick-look assessments**
 - No security implications in near term for HLA Rules
 - Security implications in near term for interface specification will be rolled into v1.0 as appropriate
 - OMT security implications only impact the OMT extensions (v0.3)
 - FRED still must be addressed; most security issues are a matter of implementation
- **TIS will prepare supporting documentation for HLA Technical Library following baseline definition**



Security Architecture -- Mid Term Current Approach

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Frequently Asked Questions

- **Following the 14th DIS Workshop, the Coordinating Committee, the STG VIP, and DMSO assembled a collection of more than 40 questions from the various DIS working groups.**
- **Questions were organized into categories, answers developed based on HLA documentation, past FAQs (from DMSO Web page), and from inputs from Coordinating Committee members.**
- **Answers formulated by DMSO, the DIS Coordinating Committee, and the DIS Steering Committee.**
- **List is posted to the DMSO Web site.**

<http://www.dmsso.mil/projects/hla/faq/>



HLA Technical Library

- **The HLA Technical Library has been established to organize the documentation and specifications of the HLA.**
- **General structure**
 - **HLA Overview Briefing**
 - **Baseline Technical Definition**
 - **HLA Glossary**
 - **Interface Specification Supporting Documentation**
 - **OMT Supporting Documentation**
 - **HLA Compliance Checklist**
 - **HLA Planning Documentation**
 - **Federation Development and Execution Process**
 - **HLA Security Architecture**
 - **RTI Documentation**
 - **Published Papers**
- **Basic outline will be reflected on DMSO Web pages, with links to other resources as appropriate.**